Missouri Botanical Garden

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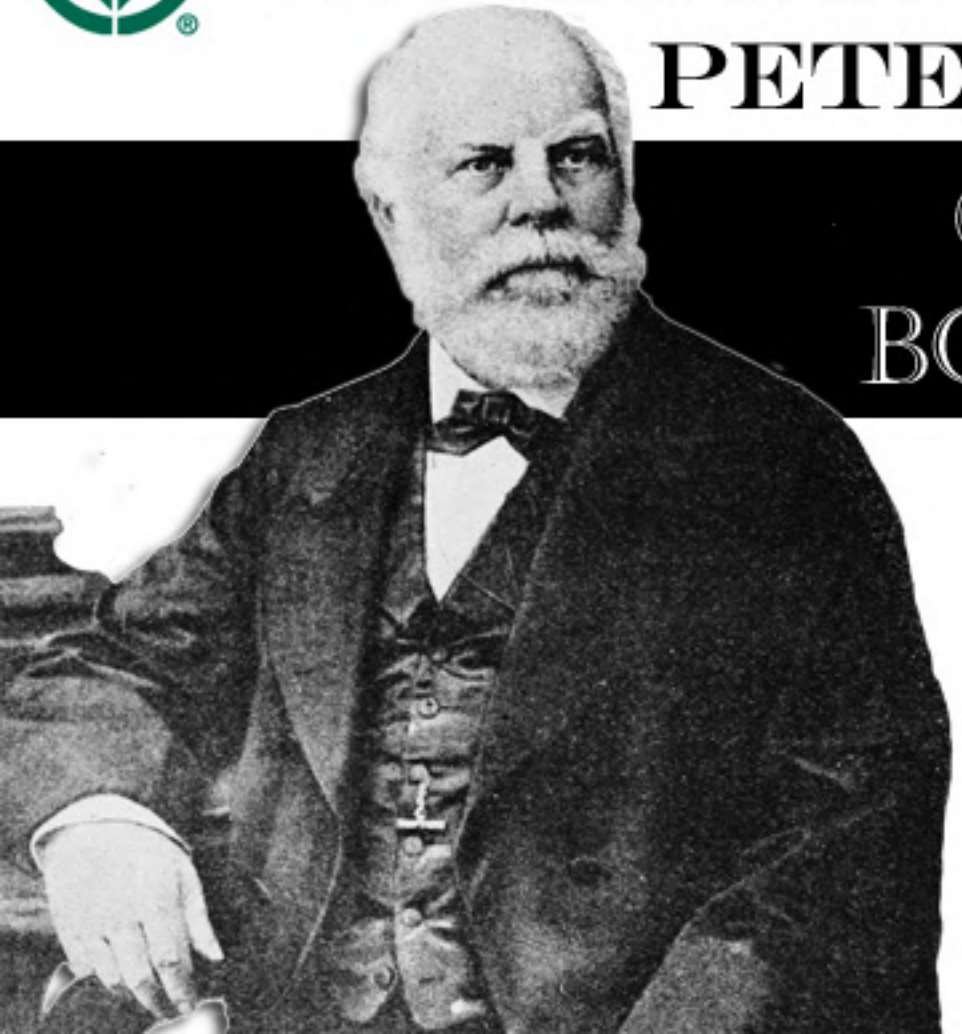
George Engelmann Botanical Notebooks



Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

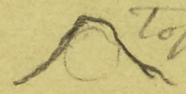
Quercus sp.

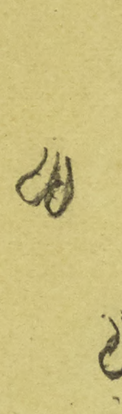
Jun 17 1877

folis subintegris, cinereis

Aiken, S Carol, Rand

+4





acorn depressed

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cm
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For .....

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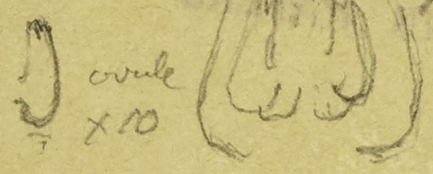
Dem 27 1876

G. appressa
very fine, Oakland, June 15th

x 10

no lo mentum yet



ovule x60

Herbarium
Cornell University
Ithaca, N.Y.

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DRUGGISTS

South West Corner Fifth and Market Streets.

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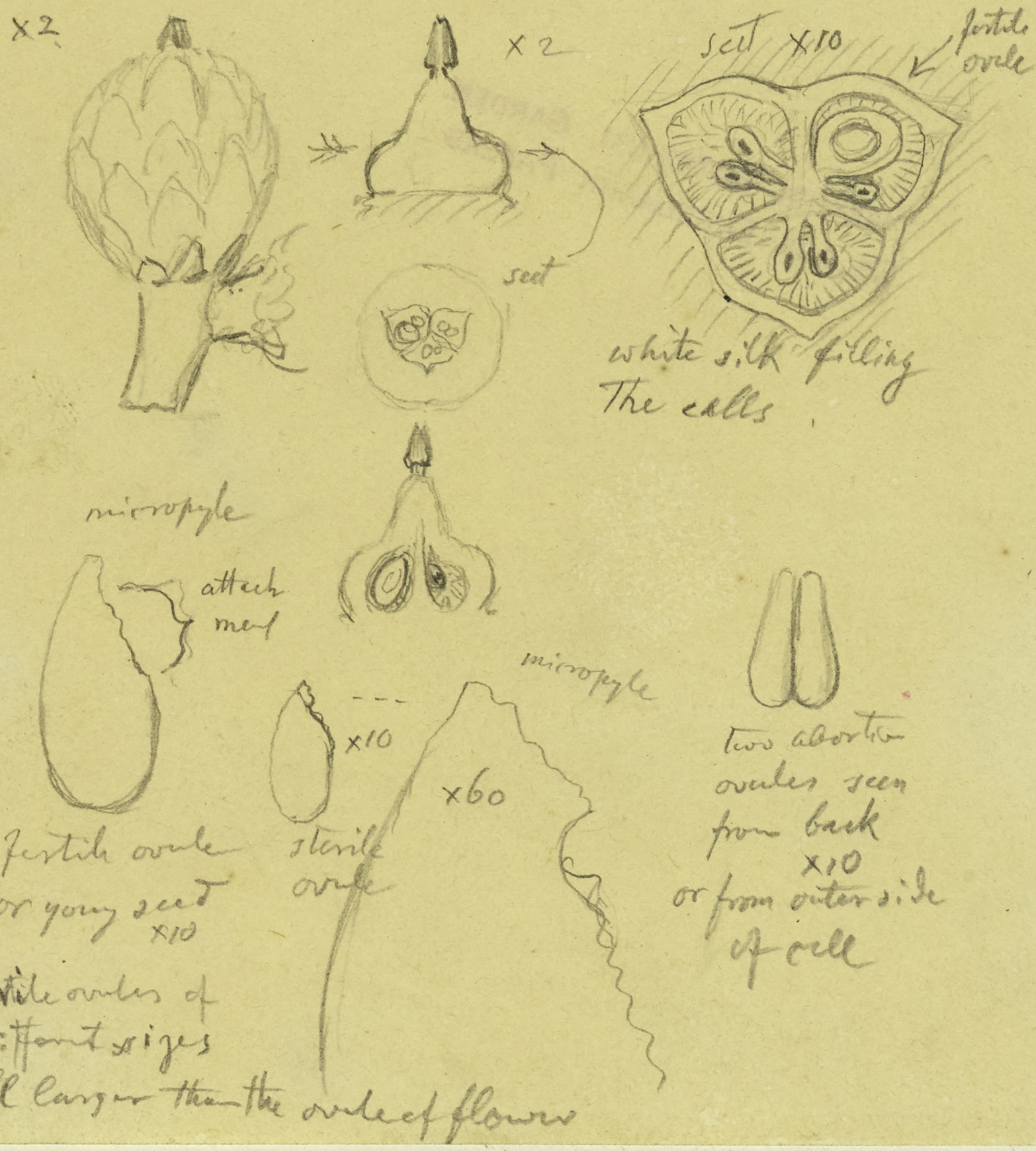
G. corrinea fresh, Lafayette Co. July 3. 1876



fruit of last year blooming

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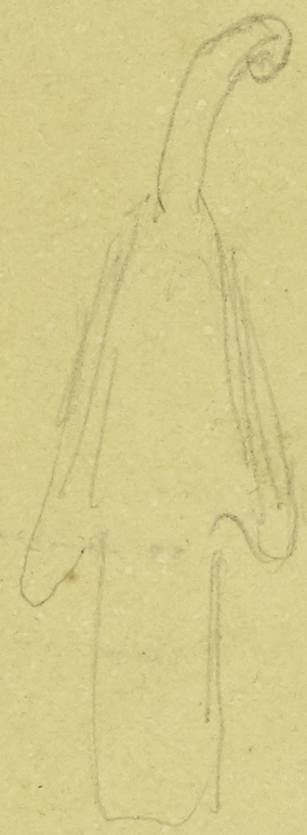
G. coccinea (fresh) July 3d. 1876

very fr'l 2 months
×2 old

Cup tomentose
petiole
smooth green

green & smooth
no ovules seen



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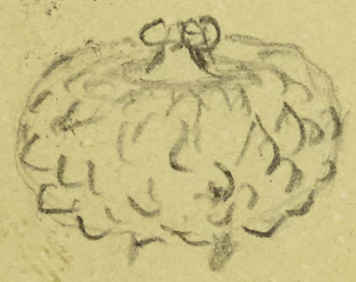
G. macrocarpa Lafayette Ave. July 4 1876

young fruit 2 months old

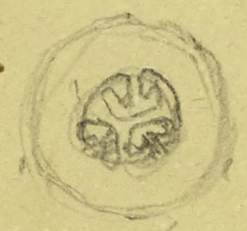
×2



×2

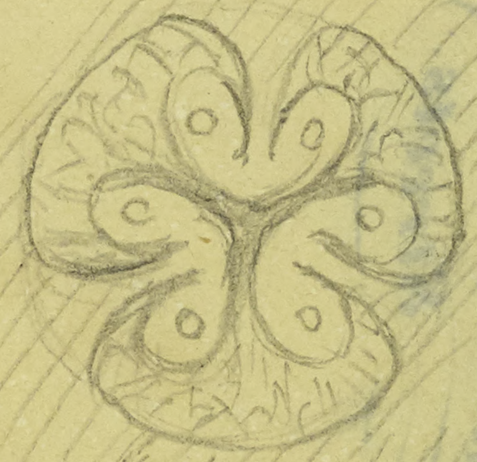
×2

sect



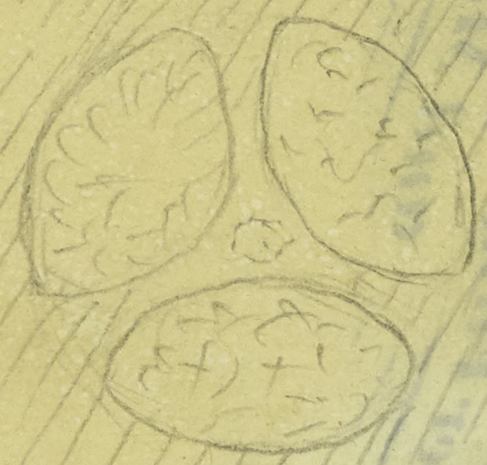
sect

×10



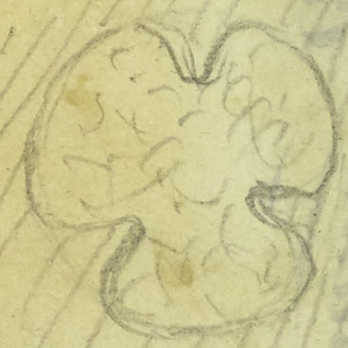
middle section

some wool in cells



lower section

below 3-celled above 1-celled



upper section

stigmata correspond with cells, therefore seeds (ovules) are 2 months old

pellary

almost equal yet in size and all fresh & green

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Quercus alba

Aug 12 1876

at Judge Woerner's house near Arsenal

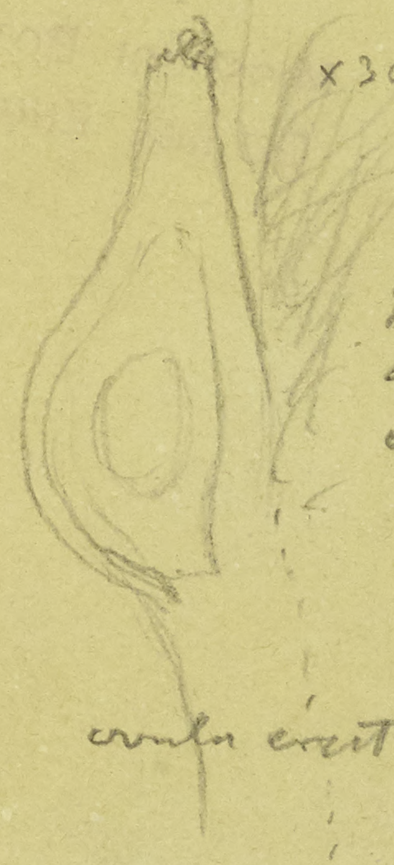
Cup full grown, acorns short (yet full length?) but apparently full formed & embryo plump & fruit good

its membranes quite soft yet and cells and dissepiments distinct.

x10

hairy cell walls quite distinct

x30



plants long hairy

Lowest part of fertile cell silky and the two cells with abortive ovules silky

ovules erecta!

x10

a

horizontal section through base of acorn; a is the coating of the seed (the membranes only) below cotyledons — 2 cells with 2 seeds are opened — others not touched, cells hairy

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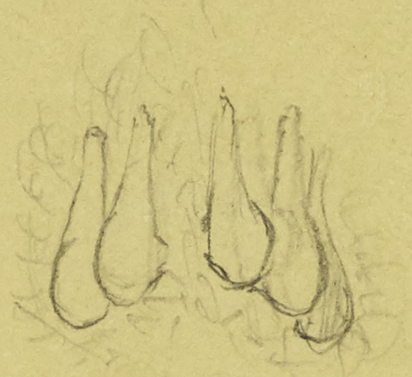
Quercus stellata St Louis Aug 13 1876

full size
Aug 13!
knobs of cupula
scarcely visible yet
at lowest part
cotyledons already firm
except lowest part

the whole cavity of
the nut is yet silky



x 10
5 abortive ovules

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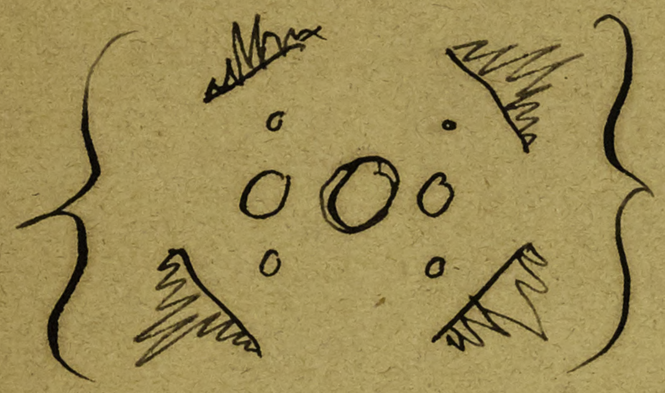
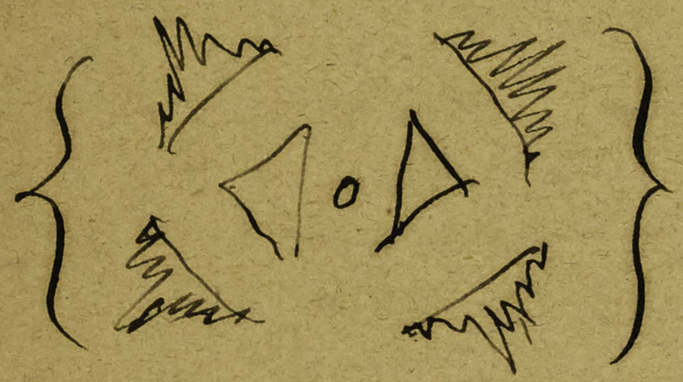
Jan 1868

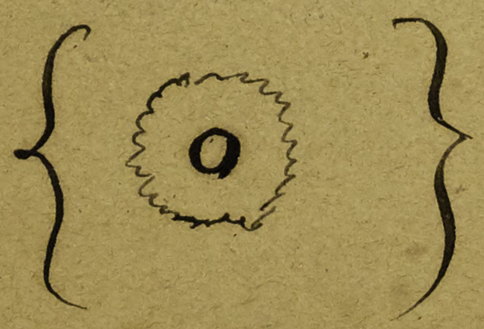
Corylus & Carpinus fm Betulaceae



Castanea, 4 spiny valves of fruit, including 3 to 7 aborted flowers.



Fagus, 4 spiny valves of fruit, including 2 (central one aborted) flowers



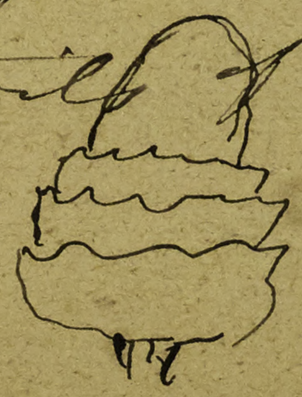
Quercus, circular, hemispherical cupula, including a single flower

over

The cupula of Quercus and the spiny valves of Fagus & Castanea correspond, are organs within the last bracts, include one flower or an inflorescence, and are as yet unexplained organs.

Scales of cupula of Quercus without regular arrangement — no leaves.

Some Quercus (Cyclobalanus) have several verticils of cupulae



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1409

over

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Dec 1. 1876

Cavities on cups of oaks, secondary abortive fem flowers? Or made by insects?

Cavities seen in Q. bicolor, Kimmswick Sept 1858

Q. Prinus shore of Potomac Va. near Ebbitt, Ward ⊕

Q. Castanea sandy bottom woods opp Mt Vernon Sept 1860

Q. prinoides Olney Sept 28 1871

Cavity & acornlet in Q. prinoides Olney RI. Sept 28. 1871

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spines: flowers short; seeds as in the last. — Pilocereus.

C. Schottii, Engelm., 4 to 10 feet high, the lower part 5-angled, ~~with distant~~ areolae and few very short and stout spines; the upper flowering portion deeply 5-ribbed, with close-set areolae bearing numerous setaceous spines, almost hiding the small flowers and small berries, — from the same localities as the two last species, may also be found in southern California.

4. Opuntia, Tourn., Miller.

Tube of the flower very short, cupshaped; petals spreading or rarely erect. Ovary ~~covered~~ with bristle-bearing areolae in the axils of small terete deciduous sepals. ~~Fruit~~ Berry succulent or sometimes dry, marked with bristly or spiny areolae, truncate with a wide umbilicus; seeds large, white, compressed, ~~seeds~~ with the embryo coiled around the albumen: cotyledons large, foliaceous, —

Articulated much branched plants, of various shapes, low and prostrate, or erect and shrub like; young branches ~~bearing~~ with small terete subulate early deciduous leaves, and in their

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April 1876

Stamens in Oaks

<u>White oaks with annual fruit</u> stamens 5 – 8

rarely (forms of undulata and of virens sometimes) only 4

very rarely (Michauxii 10

<u>Whiteoaks with biennial fruit</u>

~~Annuus~~ Chrysolepis (5 –) 10

Aggregates (Europ. Asia) prinetojaec 4 – 6

Rarely (corit) 2 – 4 2 – 4

<u>Blackoaks with annual fruit</u>

Agrifolia 6 – 8 (– 10)

pumila; hypoleuca 4

<u>Blackoaks with biennial fruit</u> 2 – 5 (– 6)

rarely more often 4

<u>Chestnuteaks</u> (dumiflora) 10

<u>Lepidobalanus</u> filaments not more than twice as long as anthers (mostly oval)

<u>Androgyne</u> filaments many times longer than small globose anthers

---

Hopkins
Nov 17 1876
Dr Lemmon
Green

All Official Letters to this Office should be addressed to THE

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and II. Botany. Captain Simpson's report of Explorations across the Great Basin of Utah. Please return them at as early a day as practicable.

By direction of the Chief of Engineers,

Very respectfully,

Your Obedient Servant,

George H. Elliot,

Major of Engineers.

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Jan 16th 1876

Nuces Quercus

Sect. Lepidobalanus

1. Nuces tenues intus glabrae luventes

ann Q. alba, macrocarpa, Prinos, stellata, virens, undulata,

biem Q. Suber, Libani, Pseudosuber (one gland of this food loose in hole, given by J. Gay, was silky tomentose, the others smooth.)

(Q. lyrata is similar but has a very thick shell.)

3. Nuces crassiores intus sericeo tomentosae

biem Q. Toxodonia, rubra, nigra, palustris, imbricaria

ann Q. prinoides, agrifolia

2. Nuces tenuiusculae (intus pubescentes)

biem Q. chrysolepis

4. Nuces crassissimae intus sericeo tomentosae

biem Q. densiflora

Knobs are peculiar to the cupulae of the white oaks — the others have flat scales

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St. Louis Jan. 15th

Dr Geo. J. Engelmann!

Dear Sir!

You have omitted to put down the quantities of two articles in the Prescription for Mrs Scheel, which I send you by bearer.

Please correct

and I remain

very respectfully

J. H. Broste

for

Poole & co.

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